



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200  
Fax 613 632-5246

# Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
P0041115	MCN001-VU	1		1 2% 10 Net 30	3126A149	Steel Spring Plunger 3/8" x 5/8" Long receive ea				20	9/26/2018	20		S113446	Stock	9/25/2018	\$ 3.77 / Ea	0		\$75.40	McMaster-Carr Supply Co.
		2			57455K710	Plastic Handle 1/4"-20 x 1/2" Depth x 3-7/8" Long				6		6		S113453	Stock	9/25/2018	\$ 3.56 / pcs	0		\$21.36	McMaster-Carr Supply Co.
		3			8662A61	Dial Indicator with Certificate 0" to 1.000" Range X 0.001" Increments receive ea				1		1		S113451	Stock	9/25/2018	\$ 96.43 / Ea	0		\$96.43	McMaster-Carr Supply Co.
		4			90273A827	Steel Phillips Flat Head Screw #10-32 x 3/8" Long receive ea				100		100		S113448	Stock	9/25/2018	\$ 0.06 / Ea	0		\$6.10	McMaster-Carr Supply Co.
		5			90276A563	Steel Round Head Screw 1/4-28 x 1-1/2" Long receive ea				50		50		S113463	Stock	9/25/2018	\$ 0.23 / Ea	0		\$11.30	McMaster-Carr Supply Co.
		6			93585A015	SS Knurled-Head Thumb Screw 6-32 Thread Size x 1/2" Long				6		6		S113458	Stock	9/25/2018	\$ 6.34 / Ea	0		\$38.04	McMaster-Carr Supply Co.
		7			9665K57	Extension Spring, SS, 20" Long x 0.25" OD x 0.02" Dia.				12		12		S113456	Stock	9/25/2018	\$ 6.02 / ft	0		\$72.22	McMaster-Carr Supply Co.
		8			MBRASSR2.250	Bearing Bronze Rod 2.250"				2		2		S113467	Stock	9/25/2018	\$ 195.30 / ft	0		\$423.79	McMaster-Carr Supply Co.
		9			MT-BRASS-C360-R1.000	Brass C360 Round Bar 1.000" MATERIAL: C360 BRASS ASTM B16				3		3		S113468	Stock	9/25/2018	\$ 24.77 / ft	0		\$74.32	McMaster-Carr Supply Co.

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name	
		10			MT-BRASS-C360-R1.250	Brass C360 Round Bar 1.250" ; MATERIAL: C360 BRASS ASTM B16						3		S113469	Stock	9/25/2018	\$ 36.69 / ft	0		\$110.07	McMaster-Carr Supply Co,	
		11			97524A032	Sealing Blind Rivet				500		500			S113449	Stock	9/25/2018	\$ 0.10 / Ea	0		\$49.10	McMaster-Carr Supply Co,
Total:										703			703								\$978.13	

Plex 9/25/2018 12:43 PM dart.Tollis.Andrew



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO041115**

**Supplier:** MCM001-VU  
McMaster-Carr Supply Co,  
P.O. Box 7690  
Chicago, IL 60680-7690 USA  
Phone: 330 995 5500  
Fax: 330 995 9600

**PO No:** PO041115

**PO Date:** 9/24/18

**Due Date:** 9/26/18

**Purchase Order  
Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
clavoie@dartaero.com

**E-MAILED**  
SEP 24 2018

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pynt Terms:** 2% 10 Net 30

**Freight Terms:**

**Special Comments:**

## **Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		3126A149 <i>Jason</i>	3126A92 1/pk	Steel Spring Plunger 3/8"-16 x 5/8" Long receive ea	Firmed	-	9/26/18	20 Ea	0 Ea	20 Ea	\$3.77/Ea	\$75.40
2		57455K710	1/pk	Plastic Handle 1/4"-20 x 1/2" Depth x 3-7/8" Long	Firmed	-	9/26/18	6 pcs	0 pcs	6 pcs	\$3.56/pcs	\$21.36
3		8662A61	1/pk	Dial Indicator with Certificate 0" to 1.000" Range X 0.001" Increments receive ea	Firmed	-	9/26/18	1 Ea	0 Ea	1 Ea	\$96.43/Ea	\$96.43
4		90273A827	100/pk	Steel Phillips Flat Head Screw #10-32 x 3/8" Long receive ea	Firmed	-	9/26/18	100 Ea	0 Ea	100 Ea	\$0.061/Ea	\$6.10
5		90276A563	50/pk	Steel RoundHead Screw 1/4-28 x 1-1/2" Long receive ea	Firmed	-	9/26/18	50 Ea	0 Ea	50 Ea	\$0.226/Ea	\$11.30
6		93585A015	1/pk	SS Knurled- Head Thumb Screw 6-32 Thread Size x 1/2" Long	Firmed	-	9/26/18	6 Ea	0 Ea	6 Ea	\$6.34/Ea	\$38.04
7		9665K57	1/pk	Extension Spring, SS, 20" Long x 0.25" OD x 0.02" Dia.	Firmed	-	9/26/18	12 ft	0 ft	12 ft	\$6.0182407/ft	\$72.22



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO041115**

## **Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
8		MBRASSR2.250	8932K54 6.5 inch* long	Bearing Bronze Rod 2.250"	Firmed	-	9/26/18	2.167 ft	0 ft	2 ft	\$195.29629/ft	\$423.21
Line Item Note 4 pcs of 6.5" = 2.1666 ft 2.167 ft SEP 25 2018												
9		MT-BRASS-C360-R1.000	8953K98 3ft	Brass C360 Round Bar 1.000" : MATERIAL:C360 BRASS ASTM B16	Firmed	-	9/26/18	3 ft	0 ft	3 ft	\$24.7733/ft	\$74.32
3 ft AT 18/09/25												
10		MT-BRASS-C360-R1.250	8953K29 3ft	Brass C360 Round Bar 1.250" : MATERIAL:C360 BRASS ASTM B16	Firmed	-	9/26/18	3 ft	0 ft	3 ft	\$36.69/ft	\$110.07
3 ft AT 18/09/25												
11		97524A032	100/pk	Sealing Blind Rivet	Firmed	-	9/26/18	500 Ea	0 Ea	500 Ea	\$0.0982/Ea	\$49.10
500 x SEP 25 2018												
<b>Grand Total:</b>											<b>\$977.55</b>	

## **Order Notes**

### **Procurement Quality Clauses**

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 9/24/18 11:44 AM dart.lavoie.chantal



200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO041115**  
Order Placed By  
**Chantal Lavoie**

Page 1 of 1  
09/24/2018

McMaster-Carr Number  
**1619001-01**

Line	Product	Ordered	Shipped
1	3126A149 Slotted Long-Nose Steel Spring Plunger, Zinc-Plated, 3/8"-16 Thread, 4.5 & 18.5 lb. Force, without Locker	20 Each	20 ✓
2	57455K71 Plastic Tapered Handle, High-Temperature, with 1/4"-20 Size 1/2" Deep Thread, 3-7/8" Long	6 Each	6 ✓
3	8662A61 Combination Dial Plunger-Style Variance Indicator with NIST Certificate & 0" to 1" Measuring Range	1 Each	1 ✓
4	90273A827 Steel Phillips Flat Head Screw, 82 Degree Countersink Angle, 10-32 Thread Size, 3/8" Long, Packs of 100	1 Pack	1 ✓
5	90276A563 Steel Decorative Round Head Slotted Screws, 1/4"-28 Thread Size, 1-1/2" Long, Packs of 50	1 Pack	1 ✓
6	93585A015 Stainless Steel High-Profile Knurled-Head Thumb Screw, 6-32 Thread Size, 1/2" Long	6 Each	6 ✓
7	9665K57 Corrosion-Resistant Extension Spring Stock, 20" Long, 0.25" OD, 0.020" Wire Diameter, Sold In 20" Lengths. Sending 8 Pieces To Meet Your Need For 12FT	8 Each	8 ✓
8	8932K54 Oil-Filled 841 Bearing Bronze Rod, 2-1/4" Diameter, 6-1/2" Long, Sold In 6-1/2" Pieces. Sending 4 Pieces To Meet Yo Ur Need For 2FT	4 Each	4 ✓
11	97524A032 Sealing Blind Rivets, Aluminum, Domed Head, with Aluminum Mandrel, 1/8" Diameter, 0.425" Long, Packs of 100	5 Packs	5 ✓



**McMASTER-CARR®**

# Packing List

200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO041115**

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**1619001-02**

Page 1 of 1

09/24/2018

Line	Product	Ordered	Shipped
9	<b>8953K98</b> Ultra-Machinable 360 Brass Rod, 1" Diameter, 3 Feet Long	1 Each	1
10	<b>8953K29</b> Ultra-Machinable 360 Brass Rod, 1-1/4" Diameter, 3 Feet Long	1 Each	1

## Ultra-Machinable 360 Brass Rod 1" Diameter

\$74.32 Each  
8953K98



Material	360 Brass
Cross Section Shape	Round
Construction	Solid
Appearance	Plain
Diameter	1"
Diameter Tolerance Range	-0.003" to 0.003"
Tolerance Rating	Standard
Yield Strength	15,000 psi
Fabrication	Cold Worked
Temper	H02
Temper Rating	1/2 Hard
Hardness	Rockwell B25 (Soft)
Heat Treatable	No
Specifications Met	ASTM B16
Density	0.307 lbs./cu. in.
Surface Resistivity	39.9 Ohms
Melting Point Temperature	1630° F
Modulus of Elasticity	14.0 ksi × 10 <sup>3</sup>
Thermal Conductivity	67 Btu/hr.-ft.-°F @ 68° F
Elongation	25%
Material Composition	
Copper	60-63%
Iron	0-0.35%
Lead	2.5-3.7%
Silicon	0-0.17%
Zinc	32.95-37.15%
Length Tolerance Range	-0.5" to 0.5"
Length	3 ft.
RoHS	Not Compliant

X 360+

With the highest lead content of all the brass alloys, 360 offers the best machinability. Often called free-machining and free-cutting brass, it stands up to high-speed drilling, milling, and tapping operations with minimal wear on your tools. It's commonly used for gears, pinions, and lock components.

8 7 6 5 4 3 2 1

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	17-732	17.11.22	VM	VM

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

SPECIFICATION:

PART NUMBER:

EXAMPLE:

C360 BRASS  
ASTM B16  
MT-BRASS-C360-R-[D.DDD]

WHERE D.DDD IS DIAMETER IN INCHES

MT-BRASS-C360-R-0.250

TOLERANCES PER MANUFACTURER SPECIFICATIONS

<b>DART</b> AEROSPACE		THERMIST, QUINCY, CANADA	
TITLE: BRASS C360 ROUND BAR			
DWG NO	REV	A	
DESIGN BY: VM 11/12/2017	DATE: 11/12/2017	FRACTIONS 1/16	
DRAWN BY: VM 11/12/2017	DATE: 11/12/2017	X 1/8	
CHECKED: SAC 11/06/2017	DATE: 11/06/2017	X 1/4	
WFL ANPR: DE 11/10/2017	DATE: 11/10/2017	X 1/2	
WFL ANPR: VM 11/12/2017	DATE: 11/12/2017	X 3/4	
DATE: 11/12/2017	DATE: 11/12/2017	X 1	
SCALE: NIS 11/12/2017	DATE: 11/12/2017	X 2	
SHEET 1 OF 1			
COPYRIGHT © 2017 DART AEROSPACE LTD			
THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED TO THE PUBLIC WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD			



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-BRASS-C360-R1.000

PO / BATCH NO.: P004415/S113468

DATE: 18/09/25

MATERIAL CERT REC'D: \_\_\_\_\_

THICKNESS ORDERED: 1.000"

QUANTITY RECEIVED: 3ft

THICKNESS RECEIVED: 1.000"

QUANTITY INSPECTED: 3ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	N	
CORROSION	Y	<input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/>	N	ASTM B16
CORRECT THICKNESS	<input checked="" type="radio"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	N	P004415
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/09/25</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

## Ultra-Machinable 360 Brass Rod

1-1/4" Diameter

\$110.07 Each  
8953K29



Material	360 Brass
Cross Section Shape	Round
Construction	Solid
Appearance	Plain
Diameter	1 1/4"
Diameter Tolerance Range	-0.003" to 0.003"
Tolerance Rating	Standard
Yield Strength	15,000 psi
Fabrication	Cold Worked
Temper	H02
Temper Rating	1/2 Hard
Hardness	Rockwell B25 (Soft)
Heat Treatable	No
Specifications Met	ASTM B16
Density	0.307 lbs./cu. in.
Surface Resistivity	39.9 Ohms
Melting Point Temperature	1630° F
Modulus of Elasticity	14.0 ksi $\times 10^3$
Thermal Conductivity	67 Btu/hr.-ft.-°F @ 68° F
Elongation	25%
Material Composition	
Copper	60-63%
Iron	0-0.35%
Lead	2.5-3.7%
Silicon	0-0.17%
Zinc	32.95-37.15%
Length Tolerance Range	-0.5" to 0.5"
Length	3 ft.
RoHS	Not Compliant

13 ft

With the highest lead content of all the brass alloys, 360 offers the best machinability. Often called free-machining and free-cutting brass, it stands up to high-speed drilling, milling, and tapping operations with minimal wear on your tools. It's commonly used for gears, pinions, and lock components.

8 7 6 5 4 3 2 1

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	17-732	17.11.22	VM	WM

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

SPECIFICATION:

PART NUMBER:

EXAMPLE:



MT-BRASS-C360-R-[D.DDD]

WHERE D.DDD IS DIAMETER IN INCHES

MT-BRASS-C360-R-0.250

TOLERANCES PER MANUFACTURER SPECIFICATIONS

<b>DART</b> AEROSPACE		Headquarters, Ontario, Canada	
TITLE BRASS C360 ROUND BAR			
DWG NO.		REV	
DESIGN BY: VM 11/11/2017		MT-BRASS-C360-R	
DRAWN BY: VM 11/01/2017		A	
CHECKED: SAC 11/06/2017		FRACTIONS 1/16	
MFG. APPR: VM 11/10/2017		1. DIMENSIONS ARE IN INCHES	
APPROVED: VM 11/21/2017		2. INTERPRETATION AND TOL. PER ASME Y14.5M-2009	
DATE: 11/1/2017		3. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED	
SCALE: NTS		WEIGHT: N/A LBS	
SHEET 1 OF 1			
COPYRIGHT © 2017 BY DART AEROSPACE LTD.			
THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.			

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-BLASS-C360-R1-250

PO / BATCH NO.: P0041115 / 5113469

DATE: 18/09/25

MATERIAL CERT REC'D: \_\_\_\_\_

THICKNESS ORDERED: 1.250"

QUANTITY RECEIVED: 3ft

THICKNESS RECEIVED: ~~1.250"~~ 1.250"

QUANTITY INSPECTED: 3ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASTM B16
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	P0041115
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

<b>QC 18 INSPECTION</b>	<b>ENGINEERING SIGNOFF (if required)</b>
INSPECTED BY: <u>AT</u> DATE: <u>18/09/25</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in